

In the Claims

1.-22. (Cancelled)

23. (Previously Presented) An adhesion-enhanced polyimide film which comprises a core layer composed of a polyimide (A) having high rigidity and a low linear expansion coefficient, at least one side of which has a thin-layer with a thickness of 0.05 to 1 μm formed by heating a coated layer comprising a) a heat-resistant surface treatment agent selected from N-[β -(phenylamino)-ethyl]- γ -aminopropyl-triethoxysilane, N-phenyl- γ -aminopropyl-triethoxysilane and γ -phenylaminopropyl-triethoxysilane and b) a polyimide precursor obtained from two components consisting of i) at least one aromatic tetracarboxylic dianhydride selected from the group consisting of 2,3,3',4'-biphenyltetracarboxylic dianhydride and 2,2',3,3'-biphenyltetracarboxylic dianhydride and ii) at least one aromatic diamine selected from the group consisting of p-phenylenediamine and 4,4'-diaminodiphenyl ether, which yields a highly heat-resistant amorphous polyimide (B), wherein the polyimide film is obtained by heating at a maximum heating temperature of 370-575°C a multilayer self-supporting film obtained by coating an organic solvent solution comprising the heat-resistant surface treatment agent and the polyimide precursor which yields the highly heat-resistant amorphous polyimide (B) onto at least one side of a self-supporting film obtained from a polyimide precursor solution which yields the polyimide (A) core layer, and wherein the polyimide film as a whole has a tensile modulus (MD) of between 6 GPa and 12 GPa and a linear expansion coefficient of 5×10^{-6} to 30×10^{-6} cm/cm/°C (at 50-200°C).

24. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, wherein the polyimide (A) is obtained from 3,3',4,4'-biphenyltetracarboxylic dianhydride and p-phenylenediamine or p-phenylenediamine and 4,4'-diaminodiphenyl ether, from 3,3',4,4'-biphenyltetracarboxylic dianhydride and pyromellitic dianhydride and p-phenylenediamine or p-phenylenediamine and 4,4'-diaminodiphenyl ether, or from pyromellitic dianhydride and p-phenylenediamine and 4,4'-diaminodiphenyl ether.

25. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, wherein the polyimide (A) is obtained using 3,3',4,4'-biphenyltetracarboxylic dianhydride and p-phenylenediamine as the main components at 50 mole percent or greater to 100 mole percent of the total.

26. (Cancelled)
27. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, wherein the polyimide (A) core layer has a thickness of 10 to 35 μm .
28. (Previously Presented) An adhesion-enhanced polyimide film in which a metal layer is laminated via an adhesive onto an adhesion-enhanced polyimide film according to claim 23.
29. (Previously Presented) A flexible metal foil laminated body comprising a metal layer laminated via an adhesive onto an adhesion-enhanced polyimide film according to claim 23.
30. (Previously Presented) A flexible metal foil laminated body comprising a metal layer laminated via an adhesive onto an adhesion-enhanced polyimide film according to claim 24.
31. (Previously Presented) A flexible metal foil laminated body comprising a metal layer laminated via an adhesive onto an adhesion-enhanced polyimide film according to claim 25.
- 32.-34. (Cancelled)
35. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, which is used to directly laminate the polyimide (B) layer onto an adhesive layer for adhesion to a metal layer.
36. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, wherein the self-supporting film obtained from the polyimide precursor solution which yields the polyimide (A) core layer has a heat loss in a range of 20-40 wt% and an imidation rate in a range 8-40%.
37. (Previously Presented) The adhesion-enhanced polyimide film according to claim 23, wherein the organic solvent solution comprising the polyimide precursor which yields a polyimide (B) thin layer is obtained by adding the heat-resistant surface treatment agent in a proportion of 1-15 wt% with respect to the polyimide precursor.
38. (Previously Presented) A laminated body comprising an adhesive layer for adhesion to a metal layer formed onto the polyimide (B) layer of the adhesion enhanced polyimide film according to claim 23.